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National Biological Information Infrastructure—Yesterday, Today, and Tomorrow

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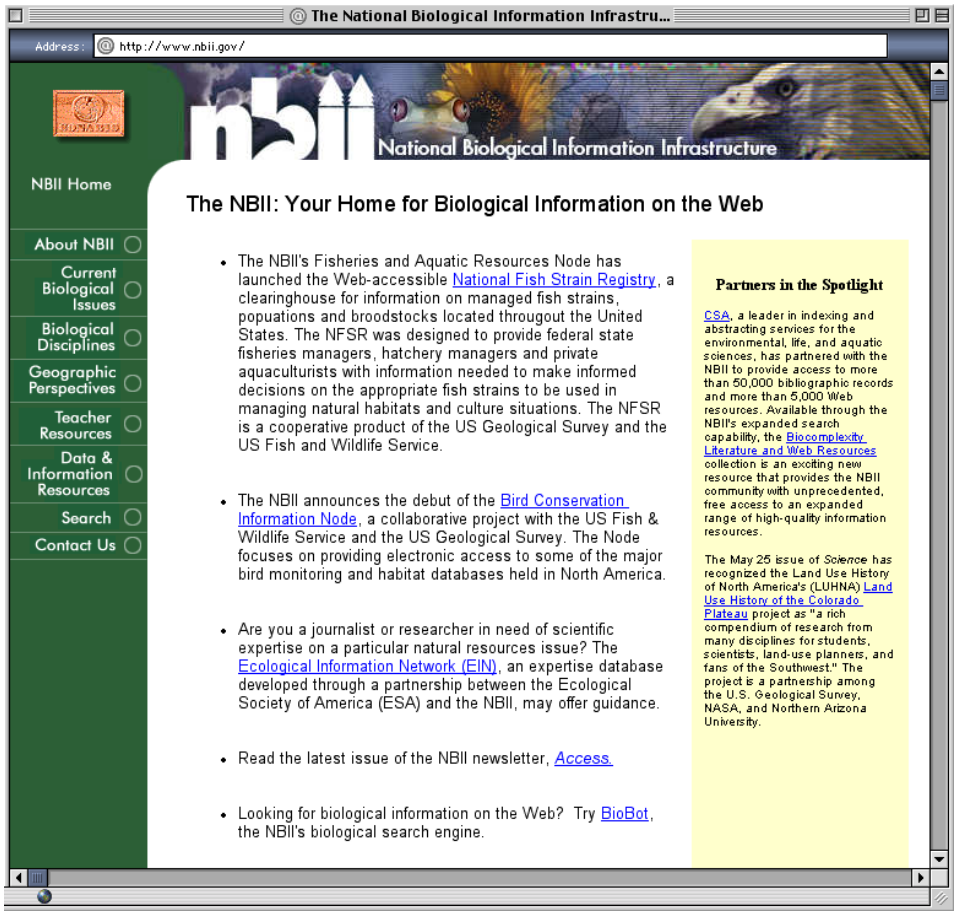

The National Biological Information Infrastructure (NBII) <www.nbii.gov> – your home for biological information on the Web – is a broad, collaborative program to provide increased access to data and information on the nation's biological resources. The development of the NBII grew out of a set of related policy statements and management recommendations that provided the foundation for this cooperative undertaking.

1993 – National Research Council Report

The National Research Council (NRC) released a report titled "A Biological Survey for the Nation." This report recommended that the Department of the Interior oversee the development of a National Biotic Resource Information System.

The system, the report recommended, should be a distributed federation of databases designed to make existing information more accessible. It should also develop new ways to collect and distribute data and information, as well as lead in promoting standards that aid these activities. The system should support continuing state efforts to develop regional and statewide environmental databases and work closely with and support database development in museums, universities, and similar organizations. Finally, it should participate in interagency initiatives to coordinate the collection and management of biodiversity data by the federal government.

1993 – Information Becomes a Mission

Partially in response to the NRC recommendation, a Secretarial Order was signed by the Secretary of the Interior in September 1993 that provided the DOI with a new dimension in its mission: To gather, analyze, and disseminate the biological information necessary for

the sound stewardship of our nation's natural resources, and to foster understanding of biological systems and the benefits they provide to society. The order stated that the DOI should "…develop the ability and resources to transfer the information gained in research and monitoring to resource managers and to others concerned with the care, use, and conservation of the nation's resources."

1994 – Executive Order 12906

In 1994, the President signed Executive Order 12906, "Coordinating Geographic Data Acquisition and Access: the National Spatial Data Infrastructure."

This order requires federal agencies, in cooperation with state, local, and tribal governments, and the private sector, to help implement the National Spatial Data Infrastructure (NSDI). The NSDI deals with the acquisition, processing, storage, and distribution of geospatial (geographically referenced) data. The responsibility for carrying out the Executive Order was given to the Federal Geographic Data Committee (FGDC). In parallel with this Executive Order, the national biotic resource information system officially became the National Biological Information Infrastructure (NBII). The NBII Program works with the FGDC to increase access and dissemination of biological geospatial data through the NBII and the NSDI.

1996 – Office of Management and Budget Circular A-130

Revised in February, this circular, "Management of Federal Information Resources," is the cornerstone of federal information resources management policy.

A-130 was authorized through the Paperwork Reduction Act, which established a broad mandate for agencies to perform their information management activities in an efficient, effective, and economical manner. A-130 requires federal agencies to take the initiative to disseminate information, to maximize usefulness of information to the government and to the public, and to assist the public in locating government information. The NBII Program works in accordance with these requirements to broaden the dissemination of biological information produced by federal government programs to the public.

1997 – National Performance Review

February marked the release of the report of the National Performance Review and Government Information Technology Services Board, "Access America: Re-engineering Through Information Technology." This report included a series of recommendations to improve the effectiveness of federal programs through information technology.

The report noted the need for an NBII. One of its recommended actions was the establishment of a federal interagency working group to coordinate the continued development of the NBII.

1998 – Teaming With Life

The Biodiversity and Ecosystems Panel of the President's Committee of Advisors on Science and Technology (PCAST) – a team of internationally renowned scientists which included a Nobel Prize winner – released "Teaming With Life: Investing in Science to Understand and Use America's Living Capital." In the report, PCAST recommended that the federal government push forward to the "next generation NBII" or NBII-2.

NBII-2 greatly enhances NBII capacities and makes it possible to integrate and synthesize many different databases, analyze information in new ways, and answer questions and present results that can be readily used by resource managers, policymakers, and educators. The development of a system of nodes (interconnected entry points to the NBII) would be crucial to NBII-2 success.

The Committee clearly saw the need for applying information technology to the management of science information stating, "Information about biodiversity and ecosystems is vital to a wide range of scientific, educational, commercial, and government uses. Unfortunately, most of this information exists in forms that are not easily used."

2001 – Node Development

In the waning days of fiscal year 2000, Capitol Hill lawmakers allocated funds for the promotion and development of the system of NBII nodes referred to in "Teaming With Life."

Each node is designed to focus on a narrowly defined scope or purpose, or on a group of issues related by a single geographic region. Today, as work on these nodes continues, the NBII community of users gains access to increasingly rich and varied information on the nation's plants and animals.

For More Information

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